

Description

The flexible *Power-D-Box*® system is a sophisticatedly designed power distribution system in a 19" rack with only 2 HE for DC applications. Thanks to its many configuration options, the respective version can be perfectly matched to your application. With the 2210 thermal-magnetic circuit breakers as fuse element, the available installation space is used optimally. Furthermore, different group signalling options are available, as well as an optional, freely configurable system redundancy.



Flexible *Power-D-Box*® DC

Features

- 19" power distribution system, made of aluminium
- For 30 or 2 x 15 pluggable 2210 circuit breakers, more upon request
- Redundant or non-redundant set-up
- Supply current up to 2 x 100 A
- Rated voltage up to DC 65 V
- Max. load current up to 16 A
- Connection via screw terminals
- Group signalling

Your benefits

- Compact, space-saving, clear design through efficient utilisation of installation space and PCB technology
- Increased machine uptime through resettable circuit breakers
- Increased operational availability through group signalling
- Significantly reduced number of individual components through pre-assembly
- Facilitated system extension through pluggable circuit protectors even during operation
- No additional installation space for min. bending radius of the connection cables required

Preferred types – for details regarding all product versions please see ordering number code

Preferred types are E-T-A products which are most frequently used by our customers.

They feature a beneficial price and shorter lead times.

Preferred types	Short description
PDB-N-2210-30R-B4-Z	2210, redundant, series/parallel connection signalling, additional terminals

Compliance



Instructions

You will find the installation instructions for each possible version via QR code on the last page.

Technical data

General data

Voltage ratings	DC -24 V, DC -48 V DC (DC 10...65 V depending on version)
Protected pole	Minus pole
Circuit breakers/ circuit protectors	Plug-in type 2210-S circuit breakers (1-pole)
Number of loads	Up to 30
Redundancy	Optional according to ordering number code
Compliance	According to EN 62368-1
Operating temperature range	0 ... 50 °C

Mechanical data

Dimensions	Width: 482.6 mm (19" mounting) Height: 88.90 mm (2 HE) Depth: 256 mm
Material	Aluminium
Grounded housing	Available for each supply input
Cable grip	Pre-mounted
Total weight	3.18 kg – 4.75 kg. You can find more details in the installation instructions.

Supply

Total current per supply	Max. 100 A (1-pole)
Terminals / Terminals on PCB / Cable cross section	M6 thread for cable lug / up to 25 mm ²
Terminals / Additional terminals on DIN rail / Cable cross section	Screw terminals / up to 35 mm ²

Loads

Current rating per load channel	max. 16 A
Terminals / Terminals on PCB / Cable cross section	Screw terminals / up to 4 mm ²
Terminals / Additional terminals on DIN rail / Cable cross section	Screw terminals / up to 4 mm ²

Group signalling

Series connection	Make contacts of the auxiliary contacts are connected in series. Max. 0.5 A, max. 1.5 mm ²
Parallel connection	Break contacts of the auxiliary contacts are connected in parallel. Max. 0.5 A, max. 1.5 mm ²

Ordering number code

PDB-N 19" Power-D-Box[®] with PCB, minus pole protected

Device types

2210 Thermal-magnetic circuit breakers

Number of loads and design version

30E 1 x 30 load circuit (1-pole protected), non-redundant

30R 2 x 15 load circuits (1-pole protected), redundant

Signalling

B4 Make contact connected in series and break contact connected in parallel

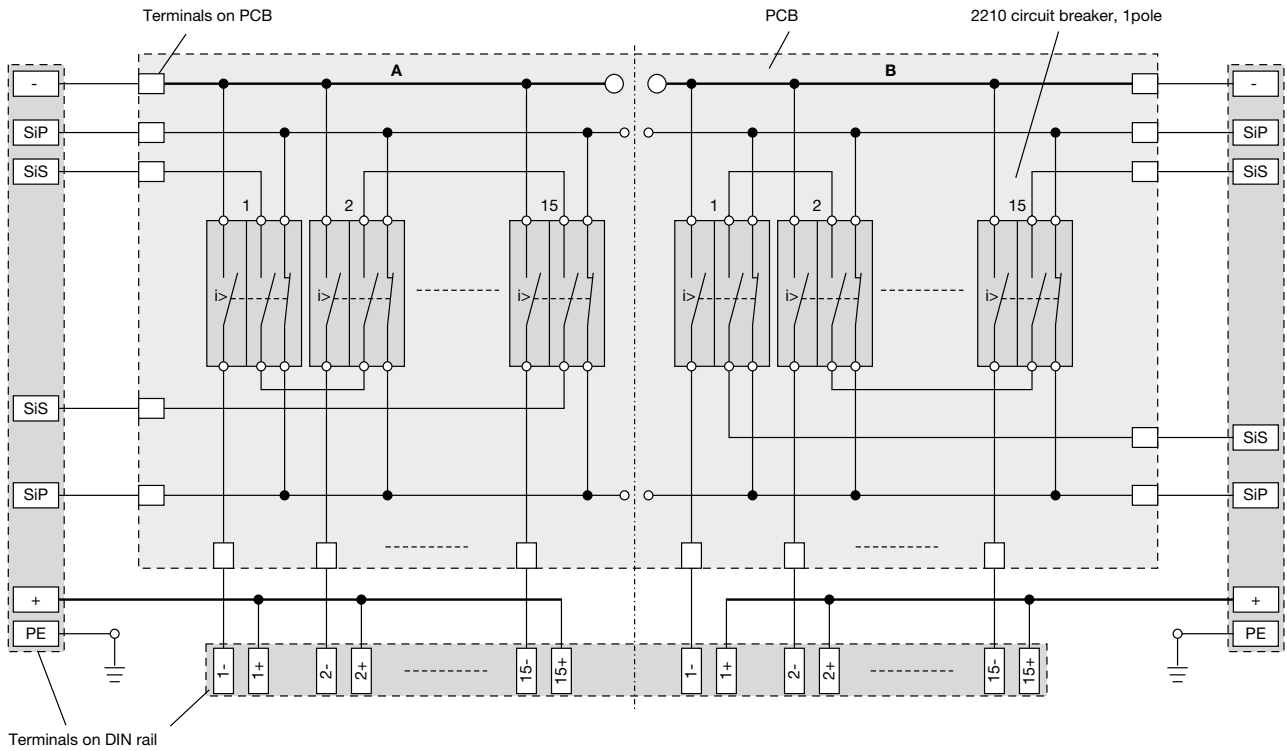
Terminal position

Z Additional terminals on the back of the mounting rail

PDB-N-2210-30R-B4-Z Ordering example

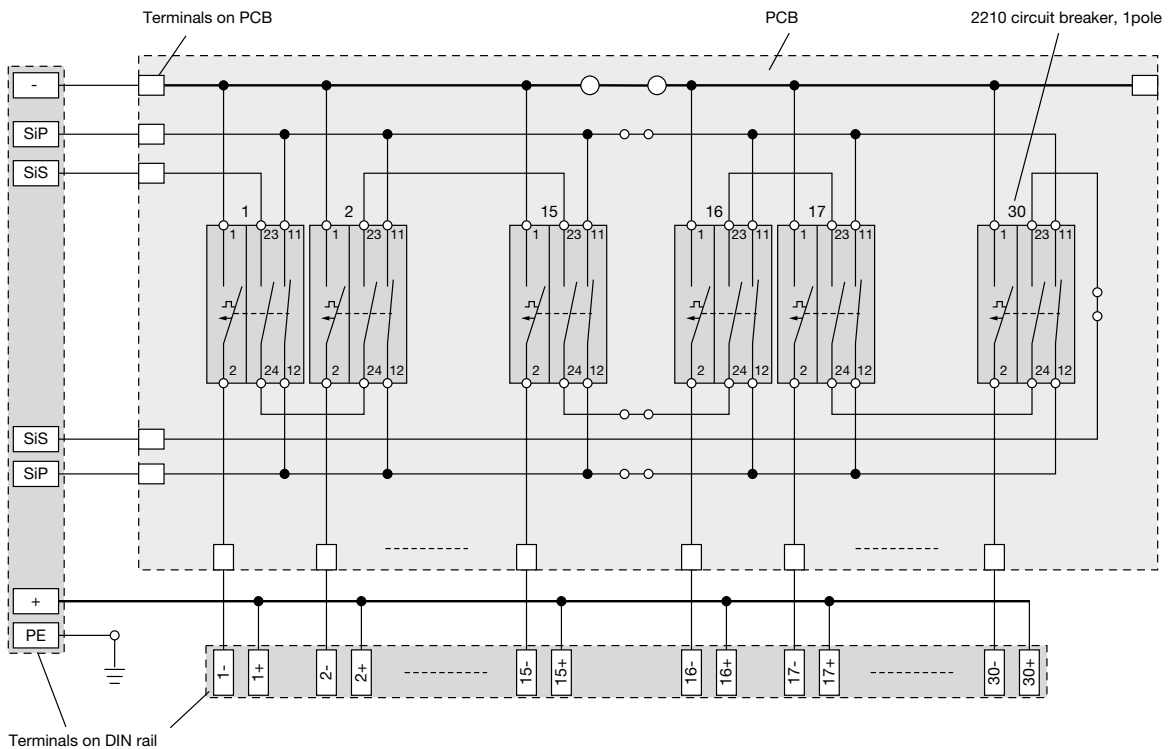
Schematic diagrams

Flexible Power-D-Box[®] DC schematic diagram (redundant)



Note: Depending on the version, the schematic diagram may vary in detail. This diagram shows the general options. You can find further information for version-specific installation instructions at the end of the document.

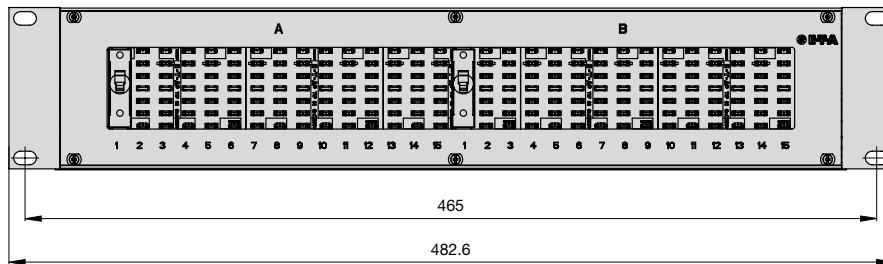
Flexible Power-D-Box[®] DC schematic diagram (non-redundant)



Note: Depending on the version, the schematic diagram may vary in detail. This diagram shows the general options. You can find further information for version-specific installation instructions at the end of the document.

Dimensions

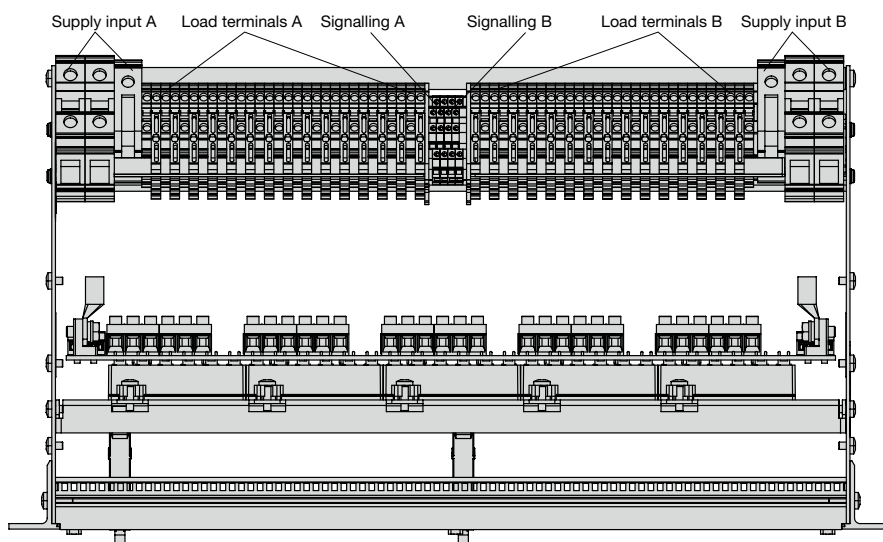
Front view/example: 2210, 1pole, non-redundant



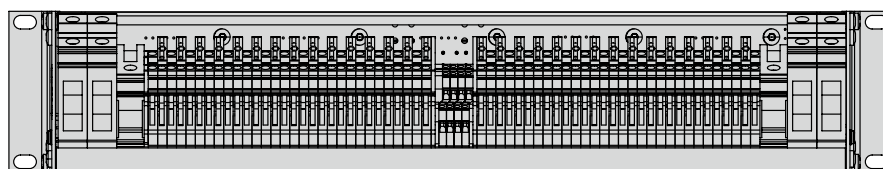
Dimensions

Example: PDB-N-2210-30R-B1

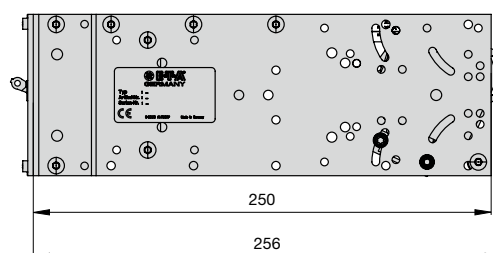
Top view (open cover)/example: additional terminals on DIN rail



Rear view/example: terminal position on DIN rail



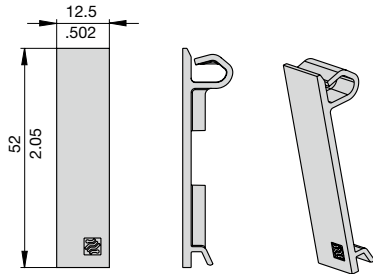
Side view/example: additional terminals on DIN rail



Accessories

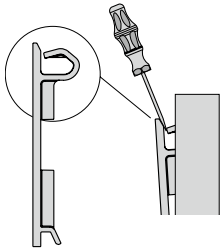
2210 circuit breakers

Blind cover for Power-D-Box
(circuit breaker types 3600/3900, 2210)
Y 308 563 01



Removal of the blind cover:

Use the screw driver to snap off at the lever edge

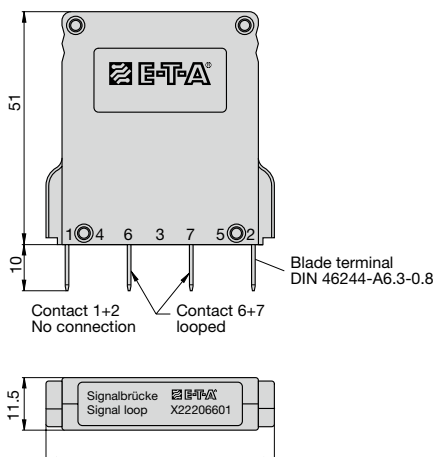


2210 circuit breakers

Signal loop

Plug-in module for circuit breakers
to bridge the looped auxiliary contacts
(series connection)

Part no. X 222 066 01
for 2210 and 3600



Installation instruction

For more details:

Follow the QR code for the current installation instruction of your „Flexible **Power-D-Box**®“. You will find detailed information using the selected ordering number code.

Installation instruction:

Flexible Power-D-Box®
for 2210 thermal-magnetic
circuit breakers
(minus pole protected)



All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of improved design, performance and cost effectiveness. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking.